



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/782,999 | 02/20/2004 | Timothy B. Rhyne | P50-0061 | 7141 |

7590 10/05/2005

Michelin North America, Inc.
Intellectual Property Department
P.O. Box 2026
Greenville, SC 29602-2026

EXAMINER

STORMER, RUSSELL D

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3617

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/782,999

Applicant(s)

RHYNE ET AL.

Examiner

Russell D. Stormer

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the shear layer and spokes of claim 1, and the enlarged end portion and the slot of claim 4 must be shown or the features canceled from the claims.

It is understood that the shear layer 120 is supposedly shown in figure 2, as are the spokes 150, but the figure merely shows the shear layer as being empty space between the membranes 130, 140. The spokes are merely shown as lines, or just the outer side of the tire 100. The other drawing figures do not show the shear layer or the spokes any better.

Since figure 2 is a cross-section, the shear layer 120 and the spokes 150 should be shown in cross-section.

The enlarged end of the spokes and the slot in the wheel are not represented at all.

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet,

Art Unit: 3617

and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. A reference to the prior application must be inserted as the first sentence(s) of the specification of this application or in an application data sheet (37 CFR 1.76), if applicant intends to rely on the filing date of the prior application under 35 U.S.C. 119(e), 120, 121, or 365(c). See 37 CFR 1.78(a). For benefit claims under 35 U.S.C. 120, 121, or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of all nonprovisional applications. If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference to the prior application must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35

U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A benefit claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed benefit claim under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

If the reference to the prior application was previously submitted within the time period set forth in 37 CFR 1.78(a), but not in the first sentence(s) of the specification or an application data sheet (ADS) as required by 37 CFR 1.78(a) (e.g., if the reference was submitted in an oath or declaration or the application transmittal letter), and the information concerning the benefit claim was recognized by the Office as shown by its

inclusion on the first filing receipt, the petition under 37 CFR 1.78(a) and the surcharge under 37 CFR 1.17(t) are not required. Applicant is still required to submit the reference in compliance with 37 CFR 1.78(a) by filing an amendment to the first sentence(s) of the specification or an ADS. See MPEP § 201.11.

Claim Objections

3. Claim 22 is objected to because of the following informalities: The claim must end with a period (.). Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 8 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 sets forth the spokes as being oriented at opposite oblique angles to the axial direction, but depends from claim 6 where the spokes are oriented parallel to the axial direction. As it is not seen how the spokes can be oriented both ways, claim 8 is too indefinite to examine on the merits.

In claim 18, the term "essentially" is indefinite as it is not clear to what degree the inextensible cords would have to be extensible in order to be "essentially inextensible."

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1, 2, 14, 15, 16, 17, 18, 19, 20, 21, and 22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 1, 1, 5, 8, 9, 10, 11, and 15, respectively, of U.S. Patent No. 6,769,465. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are broader, such as claim 1, or are the same such as claims 14-22. With respect to claim 1, it is obvious that the web spokes are set forth in the patented claim 1 as recited as the sidewall portions.

Therefore, the subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent.

Art Unit: 3617

8. Claim 23 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 25, 26, and 27 of U.S. Patent No. 6,769,465. Although the conflicting claims are not identical, they are not patentably distinct from each other because instant claim 23 is broader than each of the patented claims and it is obvious that Applicants are claiming the same invention. Further, it is obvious that the web spokes of instant claim 23 is the same element as the sidewall portions of the patented claims.

Therefore, the subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1, 2, 3, 5, 6, 16, 18, 22, 23, and 24 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lang et al.

The shear layer 5 is between the first and second membranes 6, and the spokes 13 extend transversely across the band.

11. Claims 1, 2, 4, 13, 16, 18, 22, 23, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Borland.

An elastomeric shear layer is set between membranes 5 and 7, and the spokes 18 extend transversely across the band. With respect to claim 4, the area between the rim flanges 16, 17 forms the slot in the wheel.

12. Claims 1, 2, 4, 7, 9, 11, 13, 16, 20, 22, 23, and 24 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Dodge.

The shear layers and membranes are shown at **D**, **E**, and the spokes are shown at **H** and **I**. With respect to claim 4, the slot is formed between the rim flanges.

With respect to claim 11, the spokes **H** have a curvature to facilitate bending as shown in figures 1 and 2.

13. Claims 1, 2, 5, 6, 16, 18, 20, 21, 22, and 23 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Bessler (US Patent 1,414,544).

With respect to claim 6, the spokes are oriented parallel to the axial direction as shown at 54.

14. Claims 1, 2, 3, 5, 6, 16, 18, 22, and 23 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Lambert.

The shear layer 16 is disposed between membranes 13, and the spokes 12 extend transversely across the band.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

17. Claims 14, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang et al.

The shear modulus and the tensile modulus of the shear layer is not defined in Lang et al, however, those of ordinary skill in the art could readily choose materials and designs to have a specific shear modulus, specific tensile modulus, and ratios thereof based on the intended use of the wheel, the environment in which it will be used, the weight of the vehicle, the intended cost of the wheel, etc., and any chosen modulus or ratio would have been an obvious mechanical expedient.

Art Unit: 3617

18. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang et al in view of Japanese patent 1-311902.

For the spokes 12, 13 to have a zigzag pattern or a repeating X-pattern would have been obvious as taught by Japanese 1-311902 as obvious alternate formations of spokes which would provide suitable cushioning of the tire.

19. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Borlan in view of Lakoff.

The spokes of Borland to include spokes oriented parallel to the axial direction and spokes oriented perpendicular to the axial direction would have been obvious as taught by Lakoff in order to absorb shocks and support the tire in more than one direction or plane. Note the spokes 6 and 14 of Lakoff.

20. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lang et al in view of Welter.

For the canvas layers 6 of Lang et al to form angles of between 10 and 45 degrees would have been obvious as taught by Welter in order to suitably reinforce the plies or membranes of the tire.

21. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dodge in view of Pratt.

For the mounting band to be adhesively joined to the wheel would have been obvious as taught by Pratt as such is well-known in the tire art and would better retain the tire on the rim of the wheel of Dodge and prevent accidental separation.

Art Unit: 3617

Conclusion


22. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references show other tire and wheel constructions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell D. Stormer whose telephone number is (571) 272-6687. The examiner can normally be reached on Monday through Friday, 9 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9/29/05
file


RUSSELL D. STORMER
PRIMARY EXAMINER 9/29/05